

15. (Amended) The base module of claim [11] 12, wherein at least one of said fittings has a substantially L shape.

16. (Amended) The base module of claim [11] 12, wherein the axes of said fittings are non-coaxial.

18. (Amended) The base module of claim [11] 12, wherein said fittings have an enlarged throat at one end thereof, said throat enclosing end portions of said inlet and outlet connectors.

20. (Amended) The base module of claim [11] 12, wherein said body, said communication module and said fittings are separately molded components.

REMARKS

Claims 2, 14 - 16, 18 and 20 are amended. No claims are canceled. Upon entry of the above amendment, claims 1 - 27 are presented for reconsideration by the Examiner.

Claim 2 is amended to obviate any 35 U.S.C. §112 rejections properly made by the Examiner.

Claims 14 - 16, 18 and 20 are amended to depend from claim 12 to obviate any 35 U.S.C. §112 rejections properly made by the Examiner.

Claims 1, 2 and 11 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,302,284 to Zeiner et al (hereinafter Zeiner). Zeiner discloses a fuel filter with spring-loaded retention system for retention of a filter cartridge to a filter base. Zeiner discloses a filter base module configured as a single unit 12. The base module receives the upper shell section 56 of a filter cartridge 14. The cartridge 14 is retained to the base module 12 by a collar 16 which engages a peripheral roll seam of the filter cartridge.

Claim 1 recites in pertinent part as follows:

- a body defining a receptacle for receiving a filter cartridge and a central axial opening surrounded by a coaxial lip;

- a mounting bracket extending from said body for mounting said base module to a vehicle;

- a communication module receivable in said body central axial opening at a plurality of angular orientations to said body, said communication module including a skirt which mates with said lip, an inlet conduit extending axially into said receptacle, a corresponding inlet fitting defining a fluid passageway extending away from said receptacle and an outlet fitting defining a fluid passageway extending away from said receptacle,

The base module of Zeiner is clearly a unitary article. The unitary base module receives an inlet fitting 22 axially. An outlet fitting 32 is received by the base module 12 radially offset from the inlet fitting 22. It is clear from the above-quoted portions of claim 1 that the "central axial opening surrounded by a coaxial lip" is configured to receive "a communication module" "at a plurality of angular orientations to said body". The communication module received in the "central axial opening" of the body includes "a skirt which mates with said lip, an inlet conduit extending axially into said receptacle, a corresponding inlet fitting defining a fluid passageway extending away from said receptacle and an outlet fitting defining a fluid passageway extending away from said receptacle." It is the communication module containing all these items that is "receivable in said body central axial opening at a plurality of angular orientations to said body." The structures identified in Zeiner simply do not meet the limitations recited in claim 1 as quoted and discussed above. Significantly, the Examiner can identify no reference numeral in Zeiner corresponding to a communication module. The Zeiner reference numeral corresponding to the base module of claim 1 is reference numeral 12. Reference numeral 10 of Zeiner refers to a filter assembly including a base module 12, a filter 14 and a retaining collar 16.

In sum, Zeiner discloses only a unitary base module as is typical of the prior art. Zeiner does not disclose, teach or suggest the recitations of claim 1 as quoted and discussed above.

Claim 2 depends from claim 1 and is patentable for at least the reasons stated in support of claim 1.

Claim 11 recites in pertinent part as follows:

a communication module configured to be received in said central opening and comprising inlet and outlet conduits extending axially into said receptacle and corresponding inlet and outlet connectors extending axially away from said receptacle, said connectors being in fluid communication with said inlet and outlet conduits,

wherein said communication module is receivable in said central opening at a plurality of angular orientations to said body and fixable to said body at an angular orientation selected from said plurality of angular orientations.

As discussed above, Zeiner discloses only a unitary base module. Again, the Examiner has failed to identify the communication module disclosed by Zeiner. The Examiner again quotes column 3, lines 11 - 15, as supporting an argument that Zeiner discloses Applicants' invention as recited in claim 11. The cited passage states that, "The base 12 and the disposable cartridge 14 may assume a wide variety of configurations. For the disclosed embodiment, the base 12 is a cast component forming an inverted cup-like receptacle which includes a generally cylindrical skirt 20 defining a lower receiving cavity for upper portions of the disposable cartridge." Rather than supporting the Examiner's rejection of claim 11, the cited passage establishes convincingly that the base 12 disclosed in Zeiner is a unitary "cast component". Claim 11 requires that the communication module be "receivable in" and "affixable to said body at an angular orientation selected from said plurality of angular orientations. Zeiner does not disclose, teach or suggest the recitations of claim 11 as quoted and discussed above.

Claim 3 is rejected under 35 U.S.C. §103(a) as being unpatentable over Zeiner in view of U.S. Patent No. 5,556,541 to Ruschke (hereinafter Ruschke). The Examiner begins by stating "Zeiner et al discloses the base module of claim 2 as discussed above." As Applicants have demonstrated above, Zeiner does not disclose the base module of claims 1 or 2. The Examiner then states that

Ruschke teaches a skirt 24 that fits closely over a lip 22 forming a joint. As an initial matter, there is simply no motivation to combine the reference teachings of Zeiner with those of Ruschke. Claim 3 is directed to a filter base module and does not include a filter element or housing members for a filter element. The Examiner's proposed motivation for combining Ruschke and Zeiner is absurd in view of the recitations of claim 3 and the claims from which it depends.

The Examiner has failed to present a *prima facie* case of obviousness for claim 3.

Claim 4 is rejected under 35 U.S.C. §103(a) as being obvious to one of skill in the art over Zeiner in view of Ruschke and further in view of U.S. Patent No. 5,766,463 to Janik (hereinafter Janik). As previously discussed, there is no reason to combine Zeiner with Ruschke. The combination of Zeiner and Ruschke does not teach the base module of claim 3. The addition of the teachings of Janik to a combination of Zeiner and Ruschke for which there is no motivation and which does not result in the base module of the previous claims from which claim 4 depends cannot result in a *prima facie* case of obviousness with respect to claim 4. Claim 4 is therefore patentable over the Examiner's proposed combination.

Claims 5 and 13 - 14 are rejected under 35 U.S.C. §103(a) as being obvious to one of skill in the art over Zeiner in view of U.S. Patent No. 5,635,058 to Bowman (hereinafter Bowman). Claim 5 depends from claim 1 and is patentable for at least the reasons stated above in support of claim 1. Zeiner simply does not disclose, teach or suggest the recitations of claim 1. Adding Bowman to the disclosures of Zeiner cannot, therefore, present a *prima facie* case of obviousness with respect to claim 5.

Claims 13 - 14 depend from claim 11 and are patentable for at least the reasons stated above in support of claim 11. Zeiner does not disclose, teach or suggest the recitations of claim 11. The addition of Bowman to the teachings of Zeiner cannot present a *prima facie* case of obviousness with respect to claims 13 and 14.

Claims 6 - 10, 12, 15 - 22, 24 - 25 and 27 - 28 are rejected under 35 U.S.C. §103(a) as being obvious to one of skill in the art over Zeiner in view of U.S. Patent No. 5,882,515 to Lacy et al (hereinafter Lacy). As an initial matter, claims 6 - 10 depend from claim 1 and are patentable for at least the reasons stated in support of claim 1 above. Claims 12 and 15 - 20 depend directly or indirectly from claim 11 and are patentable for at least the reasons stated in support of claim 11 above.

Claims 22, 24, 25, 27 and 28 depend directly or indirectly from independent claim 21, the patentability of which will be discussed below.

As previously discussed with reference to independent claims 1 and 11, Zeiner fails to disclose, teach or suggest the recitations of claims 1 and 11. Claims 6 - 10 are patentable for at least the reasons stated in support of claim 1, while claims 12 and 15 - 20 are patentable for at least the reasons stated in support of claim 11. The Examiner's proposed combination of Zeiner and Lacy does not disclose, teach or suggest the recitations of the underlying independent claims, be it claim 1 or claim 11. For a specific discussion of the deficiencies of Zeiner, see the discussion of the anticipation rejection of claims 1 and 11 above. Each of the Examiner's proposed obviousness rejections of claims 6 - 10, 12 and 15 - 20 is entirely deficient due to its reliance on Zeiner to teach the base module of the underlying independent claim 1 or 11.

Independent claim 21 is directed to "A method for manufacturing a base module for a filter cartridge" comprising the steps in pertinent part as follows:

- a) providing a communication module having inlet and outlet fittings;
- b) providing a body adapted to receive and mate with said communication module in a plurality of angular orientations to said communication module;
- c) mating said communication module to said body at an angular orientation selected from said plurality of angular orientations; and
- d) joining said communication module to said body.

Claim 21 recites a flexible manufacturing method by which a base module may be configured in multiple arrangements using component parts configured to fit together in "a plurality of angular orientations". Zeiner teaches a cast unitary base for a filter cartridge as discussed above with reference to independent claims 1 and 11. Zeiner does not disclose, teach or suggest the recitations of method claim 21.

Claims 22 - 27 depend directly or indirectly from claim 21 and are patentable for at least the reasons stated in support of claim 21.

Claim 22 recites the further limitations of:

wherein said communication module includes a pair of integral, axially extending inlet and outlet connectors and said inlet and outlet fittings are separate components each adapted to mate with a corresponding connector in a plurality of angular orientations to said communication module, said manufacturing method further comprising:

- e) mounting said inlet fitting to said inlet connector at a first angular orientation selected from said plurality of angular orientations;
- f) joining said inlet fitting to said inlet connector;
- g) mounting said outlet fitting to said outlet connector at a second angular orientation selected from said plurality of angular orientations; and
- h) joining said outlet fitting to said outlet connector.

Adding the disclosures of Lacy to the entirely deficient teachings of Zeiner does not disclose, teach or suggest the recitations of claim 22. Claim 22 is additionally patentable for at least these reasons.

It is an object of Lacy to provide right-angle fittings "that can rotate independently of each other and independently of the filter body" (column 1, lines 40 - 42). Applicants' claims in fact recite joining the fittings and/or the communication module to the base at selected angular orientations. Such joining is not disclosed, taught or suggested by Lacy in combination with the entirely deficient teachings of Zeiner as discussed above. Lacy, column 4, lines 9 - 16, teaches that the L-shaped fittings are swivel fittings 28, 30. "These fittings

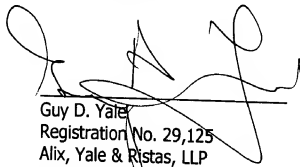
28, 30 can rotate independent of each other and independently of the filter body 22." Lacy simply does not disclose, teach or suggest fixing inlet or outlet fittings at any particular orientation to the body of a base module as recited in Applicants' claims.

In sum, the deficiencies of the Examiner's rejection of each of independent claims 1, 11 and 21 has been addressed in detail. Zeiner fails to disclose, teach or suggest the recitations of claims 1, 11 and 21. The addition of the disclosures of Ruschke, Janik, Bowman or Lacy either alone or in combination with each other does not present a *prima facie* case of obviousness or anticipation with respect to any of claims 1 - 27 for all the reasons stated above.

For all the foregoing reasons, Applicants respectfully request allowance of claims 1 - 27.

Respectfully submitted,

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Date: June 28, 2002
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